

**Notice of Allowability**

Application No.

09/667,072

Examiner

Philip B. Tran

Applicant(s)

LEE ET AL.

Art Unit

2155

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 7/30/2007.
2. ☒ The allowed claim(s) is/are 13,15,17,19,20,22-25,28-30 and 33-37 (renumbered as claims 1-17).
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All b) ☐ Some\* c) ☐ None of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),  
Paper No./Mail Date see Attached.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

  
PHILIP TRAN  
PRIMARY EXAMINER

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

2. Authorization for this examiner's amendment was given in a telephone interview with Mr. Pazmandi (Limited Recognition No. L0078), the undersigned, on August 17, 2007.

3. The application has been amended as follows:

IN THE CLAIMS:

The claims of the invention have been amended as follows:

1-12. (Canceled)

13. (Currently amended) A method implemented by an apparatus for processing multimedia content and related user preferences, the method comprising:

(a) storing user preference information in a user profile about a multimedia consumer, the user preference information including browsing preference information that describes the multimedia consumer's preferences for browsing audio-visual content, wherein the browsing preference information **includes a hierarchical data structure that** specifies

(i) a plurality of browsing elements that include a first browsing element

representing a visual key-frame summary and a second browsing element representing user-preferred browsing based on a content element, wherein said content element includes a character, a place, a time sequence and a scene depicted in the audio-visual content,

(ii) a first genre to which the plurality of browsing elements apply, and  
(iii) a respective preference value for each browsing element in the plurality of browsing elements, wherein the respective preference value indicates relative importance of the corresponding browsing element for browsing audio-visual content of the first genre;

(b) receiving an audio-visual content stream having content of the first genre;

(c) receiving user input that requests displaying content from the audio-visual content stream based on the user profile;

(d) in response to the user input and based on the preference value for the first browsing element in the browsing preference information of the user profile, displaying content from the audio-visual content stream by using the visual key-frame summary;  
and

(e) updating the preference value for the first browsing element based on the multimedia consumer's preference for the visual key-frame summary to browse audio-visual content of the first genre.

14. (Canceled)

15. (Currently amended) A method implemented by an apparatus for processing multimedia content and related user preferences, the method comprising:

(a) storing browsing preferences of a multimedia consumer, wherein the browsing preferences describing **describe** the multimedia consumer's preferences for browsing audio-visual content and **include a hierarchical data structure** specifying

(i) a plurality of summary elements that include a first summary element representing a visual key-frame summary **and a second summary element representing user-preferred browsing based on a content element, wherein said content element includes a character, a place, a time sequence and a scene depicted in the audio-visual content,**

(ii) a first genre of audio-visual content to which the plurality of summary elements apply, and

(iii) a respective preference value assigned to each summary element in the plurality of summary elements, the respective preference value indicating relative importance of the corresponding summary element for browsing audio-visual content of the first genre;

(b) receiving an audio-visual content stream having content of the first genre;

(c) receiving user input that requests displaying content from the audio-visual content stream based on the stored browsing preferences of the multimedia consumer;

(d) in response to the user input and based on the preference value for the first summary element in the browsing preferences, displaying content from the audio-visual content stream by using the visual key-frame summary; and

(e) updating the preference value for the first summary element based on the multimedia consumer's preference for the visual key-frame summary to browse audio-visual content of the first genre.

16. (Canceled)

17. (Currently amended) A system for processing multimedia content and related user preferences, the system comprising:

a data storage device for storing browsing preferences of a multimedia consumer in a data structure, **wherein** the browsing preferences describing **describe** the multimedia consumer's preferences for browsing audio-visual content and **include a hierarchical data structure** specifying

(i) a plurality of summary elements that include a first summary element representing a visual key-frame summary **and a second summary element representing user-preferred browsing based on a content element, wherein said content element includes a character, a place, a time sequence and a scene depicted in the audio-visual content,**

(ii) a first genre of audio-visual content to which the plurality of summary elements apply, and

(iii) a respective preference value assigned to each summary element of the plurality of summary elements, the respective preference value indicating relative importance of the corresponding summary element for browsing audio-visual content of

the first genre; and

a data processing apparatus configured to:

receive an audio-visual content stream having content of the first genre;

receive user input that requests displaying content from the audio-visual content stream based on the browsing preferences stored in the data storage device;

in response to the user input and based on the preference value for the first summary element in the browsing preferences, display content from the audio-visual content stream by using the visual key-frame summary; and

update the preference value for the first summary element based on the multimedia consumer's preference for the visual key-frame summary to browse audio-visual content of the first genre.

18. (Canceled)

19. (Previously presented) The method of claim 13, wherein the respective preference value for each browsing element in the plurality of browsing elements defines a respective preference weight.

20. (Currently amended) The method of claim 13, wherein the ~~plurality of browsing elements include~~ a second browsing element that specifies selective browsing based on one or more characters depicted in the audio-visual content of the first genre.

21. (Cancelled)

22. (Previously presented) The method of claim 13, further comprising:  
storing the user profile in a movable storage medium.

23. (Previously presented) The method of claim 13, wherein specifying the respective preference value for each browsing element in the plurality of browsing elements includes specifying the respective preference value based on a usage pattern of each browsing element in the plurality of browsing elements.

24. (Previously presented) The method of claim 15, wherein the respective preference value for each summary element in the plurality of summary elements defines a respective preference weight.

25. (Currently amended) The method of claim 15, wherein the ~~plurality of summary elements include~~ a second summary element that specifies **selective** browsing based on one or more characters depicted in the audio-visual content of the first genre.

26-27. (Cancelled)

28. (Previously presented) The method of claim 25, wherein browsing based on

one or more characters includes character-oriented browsing, character/place relation-oriented browsing, or time sequential browsing.

29. (Previously presented) The system of claim 17, wherein the respective preference value for each summary element in the plurality of summary elements defines a respective preference weight.

30. (Currently amended) The system of claim 17, wherein the ~~plurality of summary elements includes a second summary element that specifies~~ selective browsing based on one or more characters depicted in the audio-visual content of the first genre.

31-32. (Cancelled)

33. (Previously presented) The system of claim 30, wherein browsing based on one or more characters includes character-oriented browsing, character/place relation-oriented browsing, or time sequential browsing.

34. (Previously presented) The system of claim 17, wherein the data storage device includes a movable storage medium for storing the data structure including the browsing preferences.



35. (Previously presented) The method of claim 13, further comprising:  
receiving a content description identifying a plurality of segments within the  
audio-visual content stream; and  
using the content description to enable content based browsing of the audio-  
visual content stream.

36. (Previously presented) The method of claim 15, further comprising:  
receiving a content description identifying a plurality of segments within the  
audio-visual content stream; and  
using the content description to enable content based browsing of the audio-  
visual content stream.

37. (Previously presented) The system of claim 17, wherein the data processing  
apparatus is further configured to:  
receive a content description identifying a plurality of segments within the audio-  
visual content stream; and  
use the content description to enable content based browsing of the audio-visual  
content stream.

#### **ALLOWABLE SUBJECT MATTER**

4. A Terminal Disclaimer filed on 30 July 2007 has been entered.

5. Claims 13, 15, 17, 19-20, 22-25, 28-30 and 33-37 (renumbered as claims 1-17) are allowable over the prior art of record.

6. This communication warrants no examiner's reason for allowance, as applicant's reply makes evident the reason for allowance, satisfying the record as whole as required by rule 37 CFR 1.104 (e). In this case, the substance of applicant's remarks in the Amendment filed on 21 May 2007 and further amended claim limitations in the Examiner's Amendment (see attached) point out the reason claims are patentable over the prior art of record. Thus, the reason for allowance is in all probability evident from the record and no statement for examiner's reason for allowance is necessary (see MPEP 13202.14).

7. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip B. Tran whose telephone number is (571) 272-3991. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

9. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
PHILIP TRAN  
PRIMARY EXAMINER

Art Unit 2155  
August 17, 2007